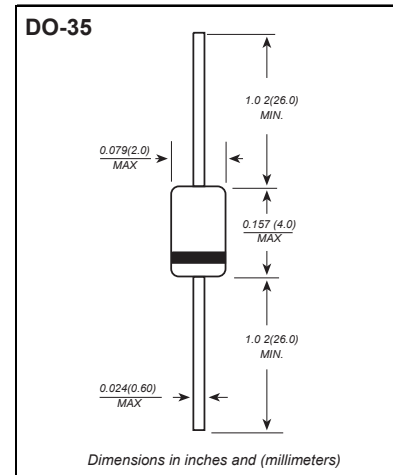


Fast Switching Surface Mount Diodes

1N4148

Features

- Fast Switching Speed
- General Purpose Rectification
- Silicon Epitaxial Planar Construction



Absolute Maximum Ratings Ta = 25

Parameter	Symbol	Rating	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Peak Repetitive Reverse Voltage	V _{RRM}	75	V
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{R(RMS)}	53	V
Forward Continuous Current *	I _{FM}	300	mA
Average Rectified Output Current *	I _O	150	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0μs @ t = 1.0s	I _{FSM}	2.0	A
		1.0	A
Power Dissipation * Derate Above 25	P _D	500	mW
		1.68	mW/
Thermal Resistance Junction to Ambient Air *	R _{θJA}	300	K/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +175	

* Valid provided that device terminals are kept at ambient temperature.

Electrical Characteristics Ta = 25

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Forward voltage	V _F	I _F =10mA			1.0	V
Peak Reverse Current	I _R	V _R = 75 V			5	μA
		V _R = 20 V, T _J = 150			30	μA
		V _R = 20V			25	nA
Capacitance	C _J	V _R = 0, f=1.0MHz			4.0	pF
Reverse recovery time	t _{rr}	I _F = 10 mA I _R = 1 mA, V _R = 6 V, R _L = 100 Ω			4.0	ns

■ Marking

Marking	1N4148
---------	--------

1N4148

■ Typical Characteristics $T_{amb} = 25^{\circ}\text{C}$, unless otherwise specified

